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FOR IMMEDIATE RELEASE

2014 State of the Market Report for PJM

MARKET MONITOR FINDS PJM WHOLESALE ELECTRICITY MARKETS COMPETITIVE

(Eagleville, PA March 12, 2015) PJM Interconnection's wholesale electric energy and capacity markets produced competitive results during 2014, according to the 2014 State of the Market Report for PJM, released today by Monitoring Analytics, LLC, the Independent Market Monitor for PJM.

The Independent Market Monitor, Joseph Bowring, announced findings of the report today. The report is the Independent Market Monitor's assessment of the competitiveness of the wholesale electricity markets managed by PJM in 13 states and the District of Columbia. It analyzes market structure, participant behavior and market performance for each of the PJM markets.

"Our analysis concludes that the results of the PJM Energy, Capacity and Regulation Markets in 2014 were competitive," Bowring said.

In 2014, the average results concealed dramatically different outcomes in the first quarter compared to the balance of the year. A combination of increased, weather related, demand, and higher fuel costs in the first quarter led to a significant increase in average energy prices in 2014 compared to 2013, despite lower prices for the balance of the year. The real-time load-weighted average price of energy (LMP) increased 37.4 percent in 2014 compared to 2013, from \$38.66 per MWh to \$53.14 per MWh. The real-time, load-weighted, average LMP increased by 132.8 percent for the first quarter of 2014 and decreased by 1.9 percent for the balance of the year.

The increase in prices was a combined result of higher fuel prices and higher demand. The price of natural gas increased significantly in January while the prices of natural gas and coal were otherwise relatively flat in 2014 compared to 2013. If fuel costs in 2014 had been the same as in 2013, holding everything else constant, the load-weighted LMP would have been lower, \$47.43 per MWh instead of the observed \$53.14 per MWh. While fuel costs contributed to higher prices, the load-weighted average LMP would still have been 22.7 percent higher in 2014 than in 2013 even if fuel costs had not increased. Higher demand in the first quarter was the reason for this increase.

Energy prices in PJM in 2014 were set, on average, by units operating at, or close to, their short run marginal costs, although this was not always the case during the high demand hours in January. This is evidence of generally competitive behavior and resulted in a competitive market outcome.

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Net revenue is a key measure of overall market performance as well as a measure of the incentive to invest in new generation to serve PJM markets. In 2014, average net revenues increased by 74 percent for a new combustion turbine, 30 percent for a new combined cycle, 113 percent for a new coal plant, 43 percent for a new nuclear plant, 24 percent for a new wind installation, and 7 percent for a new solar installation. Increases in 2014 net revenues were primarily the result of higher energy net revenues in January 2014. A new combined cycle would have been profitable in 12 of 19 zones in 2014 while a new CT would have been profitable in 10 eastern zones. A new coal unit and a new nuclear unit would not have been profitable in any zone in PJM in 2014.

Energy uplift charges increased by \$96.3 million or 11.1 percent, from \$868.4 million in 2013 to \$964.7 million in 2014, but this was entirely the result of the first quarter. Energy uplift charges increased by \$482.9 million, 182.5 percent, in the first three months which was offset by reductions in energy uplift charges of \$386.6 million in the last nine months compared to 2013.

Total payments for demand response programs increased by \$211.6 million or 43.5 percent, from \$475.0 million in 2013 to \$675.7 million in 2014. The capacity market is the primary source of revenue to participants in PJM demand response programs. In 2014, payments to demand response resources in the capacity market increased \$194.5 million while the balance was for energy market programs.

Congestion costs increased in PJM by \$1,255.3 million or 185.5 percent, from \$676.9 million in 2013 to \$1,932.2 million in 2014, primarily as a result of the first quarter. Congestion costs were \$1,236.1 million in the first quarter. Congestion reflects the underlying characteristics of the power system, including the capability of transmission facilities, the fuel cost and geographic distribution of generation facilities and the geographic distribution of load. Congestion is neither good nor bad, but is a direct measure of the extent to which there are multiple marginal generating units dispatched to serve load as a result of transmission constraints and the costs of operating those units. ARRs and FTRs served as an effective, but not total, offset against congestion in 2014. ARR and FTR revenues offset 90.8 percent of the total congestion costs in the Day-Ahead Energy Market and the balancing energy market within PJM for the first seven months of the 2014 to 2015 planning period.

The Independent Market Monitor (also known as the Market Monitoring Unit or MMU) evaluates the operation of PJM's wholesale markets to identify ineffective market rules and tariff provisions, proposes improvements to market rules and tariff provisions when needed, monitors compliance with and implementation of the market rules, identifies potential anticompetitive behavior by market participants and provides comprehensive market analysis critical for informed policy and decision making. Joseph Bowring, the Market Monitor, ensures the independence and objectivity of the monitoring program.

For a copy of the State of the Market Report, visit Monitoring Analytics at: <u>http://www.monitoringanalytics.com/reports/PJM State of the Market/2014.shtml</u>